

RESUMO CURRICULAR



1. Dados Pessoais

Nome:	Dulcineia Maria de Sousa Ferreira Wessel
Título ou Categoria profissional	Professora Adjunta
Instituição	IPV - Escola Superior Agrária de Viseu

2. Formação académica

Grau	Ano	Nome do curso ou área científica	Instituição
Licenciatura	1988	Chemistry	University of Coimbra
Master	1996	Materials Engineering	University of Aveiro
PhD	2004	Chemistry	University of Aveiro

3. Experiência profissional mais relevante

- 2011 - present** Career restart in the Agricultural Polytechnic School of Viseu.
- 2008 - 2010** Extended maternity leave (partly spent in Germany).
- 2006 - 2008** Agricultural Polytechnic School of Viseu (ESAV), Portugal: Vice-President of the Executive Council.
- 2004 - 2006** ESAV: Director of the Agro-Food Industries Department.
- 2003 - 2006** ESAV: President of the General Members' Committee.
- 2003 - 2005** SPQ: President of the Food Chemistry Division of the Portuguese Chemical Society (SPQ).
- 2002 - 2004** ESAV: Director of the 1st cycle of studies in the graduation ("Licenciatura") in Agro-Food Industries Engineering.
- 1998 - 2008** ESAV: Member of the Scientific Committee.
- 1998 - present** ESAV: "Professor Adjunto", main responsibility for the courses in General Chemistry and Organic Chemistry for the "Licenciatura" in Agro-Food Industries Engineering, Forest Engineering, Zootechnic Engineering and Winegrowing Sciences Engineering.
- 1992 - 1997** ESAV: Assistant, main responsibility for the courses in General Chemistry and Organic Chemistry for the "Licenciatura" in Agro-Food Industries Engineering, Forest Engineering, Zootechnic Engineering, Agronomic Engineering.
- 1992 - 1995** Technological Polytechnic School of Viseu: Assistant, teaching Informatics to students that will graduate in Mechanical Engineering and Wood Engineering.

4. Principais actividades de investigação

- 2006 - Jan 2009** Leader of the Project PTDC/AGR-ALI/74587/2006 "Dried Pears, Promotion of a Traditional Food Product Using Scientific Methodology" financed by the Foundation for Science and Technology (FCT) of the Ministry of Science, Technology and Higher Education. Participating institutions: (In Portugal)

University of Aveiro; Association for the Development of Industrial Aerodynamics – University of Coimbra; Department of Mechanical Engineering – Technology Polytechnic School of Viseu; National Institute of Biological Resources - Ministry for Agriculture, Rural Development and Fisheries; (In France) Institut National de la Recherche Agronomique, Rennes.

2001 - 2007

ESAV: Coordinator of the project AGRO nº 740 "Valorisation of Regional Varieties of Pears and Apples Through Biologic Production" and of the project AGRO nº 158 "Valorisation of Genetic Resources of Regional Varieties of Pears and Apples". Both financed by the Ministry for Agriculture, Rural Development and Fisheries of Portugal.

5. Publicações mais relevantes

Journals

- "Evaluation of Textural Properties in Apples of Regional Varieties" Guiné RPF, Andrade S, Correia AC, Jordão AM, Lopes AD, Ferreira D, *International Journal of Food Properties* **2011**, 14, 331-338.
- "Properties of Regional Portuguese Apple Cultivars Produced in Conventional and Organic Modes" Guiné RPF, Andrade S, Sousa R, Alves A, Teixeira L, Figueiredo C, Fonseca S, Soares S, Correia AC, Jordão AM, Lopes AD, **Ferreira D**, *International Journal of Fruit Science* **2010**, 10, 416-424.
- "Phenolic, dietetic fibre and sensorial analyses of apples from regional varieties produced in conventional and biological mode" Guiné RPF, Sousa R, Alves A, Teixeira L, Figueiredo C, Fonseca S, Soares S, Sousa I, Almeida P, Correia AC, Jordão AM, Lopes AD, **Ferreira D**, *Agric Eng Int: CIGR Journal* **2010**, 12(2), 70-78.
- "Composition of Regional Portuguese Apple Cultivars in Different Harvest Years" Guiné RPF, Sousa R, Alves A, Figueiredo C, Fonseca S, Soares S, Correia AC, Jordão AM, Lopes AD, **Ferreira D**, *International Journal of Fruit Science* **2009**, 9, 360-371.
- "Effect of Ripening Stage on the Solar Drying Kinetics and Properties of S. Bartolomeu Pears (*Pyrus communis* L.)" Guiné R, Lopes P, Barroca MJ, **Ferreira D**, *International Journal of Academic Research* **2009**, 1, 46.
- "Effect of Sun-Drying on Microstructure and Texture of S. Bartolomeu Pears (*Pyrus communis* L.)" **Ferreira D**, Lopes da Silva JA, Pinto G, Santos C, Delgadillo I, Coimbra MA, *J. European Food Research and Technology* **2008**, 226(6), 1545.
- "Study of the Drying Kinetics of Solar-Dried Pears" Guiné RPF, **Ferreira DMS**, Barroca MJ, Gonçalves FM, *Biosystems Engineering* **2007**, 98(4), 422.
- "Study of the Solar Drying of Pears" Guiné RPF, **Ferreira DMS**, Barroca MJ, Gonçalves FM, *International Journal of Fruit Science* **2007**, 7 (2), 101.
- "Chemical and Microbiological Characterization of Portuguese Varieties of Pears" Barroca MJ, Guiné RPF, Pinto A, Gonçalves FM, **Ferreira DMS**, *Food and Bioproducts Processing: Trans IChemE*, part C **2006**, 84(C2), 109.
- "Composition of Phenolic Compounds in a Portuguese Pear (*Pyrus communis* L. var. S. Bartolomeu) and Changes After Sun-Drying" **Ferreira D**, Guyot S, Marnet N, Delgadillo I, Renard CMGC, Coimbra MA, *Journal of Agricultural and Food Chemistry* **2002**, 50, 4537.
- "Determination of the Degree of Methylesterification of Pectic Polysaccharides by FT-IR Using an Outer Product PLS1 Regression" Barros AS, Mafra I, **Ferreira D**, Cardoso S, Reis A, Lopes da Silva JA, Delgadillo I, Rutledge DN, Coimbra MA, *Carbohydrate Polymers* **2002**, 50, 85.
- "Use of FT-IR Spectroscopy to Follow the Effect of Processing in Cell Wall Polysaccharides Extracts of a Sun-Dried Pear" **Ferreira D**, Barros A, Coimbra MA, Delgadillo I, *Carbohydrate Polymers* **2001**, 45, 175.

6. Outras actividades

(Most relevant scientific communications / activities)

Invited lectures at Conferences

- Ferreira D.** Sweet as "Pêra Passa de Viseu". *8th International Meeting of the Portuguese Carbohydrate Group*. University of Braga, Portugal. 6-10 September 2009.
- Ferreira D.** How Carbohydrate Research Supports Local Agro-Food Production. *Carbohydrates as Organic Raw Materials V (CORM V): Building a Sustainable Future*. Faculty of Science – University of Lisbon, Portugal. 20-23 January 2009.
- Ferreira D,** Andrade S, Teixeira L, Figueiredo C, Guiné R, Lopes A, Correia AC, Jordão A. Influence of the Biologic Versus Conventional Production in Nutrition, Sensorial and Texture Properties of Regional Varieties of Apples. *1st National Symposium on National Fruticulture*. Alcobaca, Portugal. 12-13 October 2006.
- Ferreira D,** Delgadillo I, Coimbra MA. Dried Pear of Viseu: Valorisation of an Agro-Food Product Traditional of the Region Beira Alta. *IVth Meeting of Food Engineering and Nutrition*. Piaget Institute of Viseu, Portugal. 3-4 June 2004.
- Ferreira D,** Silva JL, Santos C, Delgadillo I, Coimbra MA. Changes of Cell Wall Polysaccharides Composition in a Portuguese Pear (*Pyrus communis* L. var. S. Bartolomeu) After Sun-Drying. *5th International Meeting of the Portuguese Carbohydrate Group* (Glupor 5). University of Beira Interior, Covilhã, Portugal. 7-10 September 2003.

Other invited lectures and seminars

- 2003** Lecture "Isolation and Characterization of Polysaccharides and Phenolic Compounds of Fresh and Processed Pear". European Community Education Programme, within the framework of the Erasmus programme. Host institution: Department of Biotechnology and Food Science - University of Burgos, Spain.
- 2003** Seminar "Dried Pear of Viseu. A Study About a Sun-Dried Fruit". Agricultural Polytechnic School of Coimbra, Portugal.
- 2003** Seminar "Studies on Dried Pear. Traditional Agro-Food Product of the Region of Viseu". Piaget Institute of Mirandela, Portugal.
- 2001** Lecture "Traditional Portuguese Dried Pear: Presentation and Characterisation of Cell Wall Polysaccharides". *Unité de Recherches Cidricoles, Biotransformation des Fruits et Légumes* - INRA, Rennes, France.

Oral presentations at Conferences

- Guiné RPF, Barroca MJ, Lopes P, Silva V, Lima MJ, **Ferreira D.** Comparative Study of Pear Drying Using Solar Stove and Tunnel Drying. *5th Central European Congress on Food*. Bratislava, Slovakia. 19-22 May 2010.
- Guiné RPF, Barroca MJ, Lopes P, Silva V, Lima MJ, **Ferreira D.** Properties of Pears Dried with Different Drying Processes. *5th Central European Congress on Food*. Bratislava, Slovakia. 19-22 May 2010.
- Ferreira D,** Andrade S, Teixeira L, Figueiredo C, Guiné R, Lopes A, Correia AC, Jordão A. Nutrition, Sensorial and Texture Attributes of Apples of Regional Variety. *Colloquium AGRO 740 project*. Agrarian Station of Viseu (Ministry for Agriculture, Rural Development and Fisheries). Viseu, Portugal. 25 May 2006.
- Ferreira D,** Delgadillo I, Coimbra MA. Changes in Cell Wall Polysaccharide Composition of a Sun-Dried Pear. *11th European Carbohydrate Symposium*. Faculty of Science – University of Lisbon, Portugal. 2-7 September 2001.

Poster presentations at conferences

- Guiné RPF, Lima MJ, Barroca MJ, **Ferreira D.** Analysis of the Alterations in the Colour of Pears Dried Under Different Systems. Proceedings of *17th International Drying Symposium*. Magdeburg, Germany. 3-6 October 2010.
- Guiné RPF, Lima MJ, Barroca MJ, **Ferreira D.** Influence of the Drying Method on the Composition of Dried Pears. Proceedings of *17th International Drying Symposium*. Magdeburg, Germany. 3-6 October 2010
- Guiné R, Barroca MJ, Lopes P, Silva V, Lima MJ, **Ferreira D.** Evaluation of the Colour of Pears Dried Using Different Methods. Proceedings of the *5th Central European Congress on Food (CD-Rom)*, pp 147-151. Bratislava, Slovakia. 19-22 May 2010.
- Guiné RPF, Barroca MJ, Lopes P, Silva V, Santos M, **Ferreira D.** Estimation of the Diffusivities and Mass Transfer Coefficients for Pears Dried Under Different Methods. Proceedings of the *5th Central European Congress on Food (CD-Rom)*, pp 6. Bratislava, Slovakia. 19-22 May 2010.
- Guiné RPF, Lopes P, Barroca MJ, **Ferreira DMS.** Properties of Pears Harvested at Different Ripening Stages. Proceedings of the *9th Conference on Food Chemistry (CD-Rom)*. Angra do Heroísmo, Azores. 29 April - 2 May 2009.
- Guiné RPF, Lopes P, Barroca MJ, **Ferreira DMS.** Solar Drying Kinetics of Pears Harvested at Different Ripening Stages. Proceedings of the *9th Conference on Food Chemistry (CD-Rom)*. Angra do Heroísmo, Azores. 29 April - 2 May 2009.
- Ferreira D,** Delgadillo I, Coimbra MA. Modification of Pectic Polysaccharides of a Portuguese Pear After Sun-drying. *XXIIIrd International Carbohydrate Symposium*. Whistler, Canada. 23-28 July 2006. (Financial support of Calouste Gulbenkian Foundation in Portugal)
- Ferreira D,** Delgadillo I, Coimbra MA. Modification of Hemicellulosic Polysaccharides of a Portuguese Pear After Sun-Drying. *Glupor 6 / 3rd Iberian Carbohydrate Meeting*. Coimbra, Portugal. 11-15 September 2005.
- Guiné RPF, Barroca MJ, Pinto A, Gonçalves F, Salomé C, Monteiro V, **Ferreira D.** Improvements in the Traditional Method Used to Produce Dried Pears in Portugal. *INTRAFOOD2005: Innovations in Traditional Foods*. Valencia, Spain. 25-28 October 2005. (Financial support of the Portuguese Foundation for Science and Technology - MCTES)
- Ferreira D,** Guyot S, Marnet N, Delgadillo I, Renard CMGC, Coimbra MA. Changes on the Profile of Phenolic Compounds in a Portuguese Pear (*Pyrus communis* L. Var. S. Bartolomeu) After Sun-Drying. *1st International Conference on Polyphenols and Health*. Vichy, France. 18-21 November 2003. (Financial support of the Portuguese Foundation for Science and Technology - MCTES)
- Ferreira D,** Barros AS, Delgadillo I, Coimbra MA. Calibration Models for Glucuronoxylans and Xyloglucans in Pear Cell Wall Extracts by FT-IR Spectroscopy. *XXIst International Carbohydrate Symposium*. Cairns, Australia. 7-12 July 2002. (Financial support of the Portuguese Foundation for Science and Technology - MCTES)
- Ferreira D,** Barros A, Delgadillo I, Coimbra MA. Effect of Sun-Drying in Pear Cell Wall Polysaccharide Extracts Analysed by FT-IR. *20th International Carbohydrate Symposium*. Hamburg, Germany. 27 August - 1 September 2000. (Financial support of the Portuguese Foundation for Science and Technology - MCTES)
- Ferreira D,** Coimbra MA, Delgadillo I. Effect of Sun-Drying in Pear Cell Wall Polysaccharide. *Plant Polysaccharides 2000*. Wageningen, Holland. 23-26 August 2000. (Financial support of Calouste Gulbenkian Foundation in Portugal)
- Ferreira D,** Barros A, Delgadillo I, Coimbra MA. Use of FT-IR Spectroscopy to Follow the Effect of Processing in Cell Wall Polysaccharide Extracts of a Sun-Dried Pear. *3rd International Meeting of the Portuguese Carbohydrate Chemistry Group and 1st Iberian Carbohydrate Meeting*. University of Aveiro, Portugal. 19-23 September 1999.

Ferreira D, Delgadillo I, Coimbra MA. Isolation and Analysis of Cell Wall Polysaccharides of a Traditional Sun Dried Pear. *8th International Cell Wall Meeting, Norwich, England*. 1-5 September 1998.

Organisation of Scientific Conferences

President of the Organising Committee and member of the Scientific Committee of the 8th National Conference in Food Chemistry organized by SPQ; Member of the Scientific Committee of the 9th National Conference in Food Chemistry organized by SPQ; Member of the Scientific Committee of MICRO'05 BIOTEC'05 organized by Portuguese Society of Microbiology.

Jury Member

Councillor in the formal hiring process for academic staff. PhD examination of Chemistry Engineers.

Supervision of Internships

Supervision of 11 students in the curriculum of the 5th year of studies in Agro-Food Industries Engineering in ESAV.

Professional Memberships

- Portuguese Chemical Society.
- Carbohydrate Group of the Portuguese Chemical Society.
- Division of Food Chemistry of the Portuguese Chemical Society.

Member of the Research Center of the Polytechnic Institute of Viseu (CI&DETS)